



Product: [O-10GA25A](#)

CAT 6A 4P23AWG, F/UTP, PVC Inner Jkt, PE Outer Jkt, Outdoor

Product Description
CAT 6A 4PR x 23AWG U/UTP, Solid Bare Copper Conductors, PO Insulation, PVC Inner Jacket, PE Outer Jacket, Outdoor

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Horizontal and building backbone Cable for outdoor application. Support current and future category 6 and 6A applications:such as 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T,ISDN, ATM as well as PoE application etc. |
|------------------------|---|

Physical Characteristics (Overall)

| Conductor | | |
|------------------------|-----------|------------------|
| AWG | Stranding | Material |
| 23 | Solid | BC - Bare Copper |
| Conductor Count: | | 8 |
| Total Number of Pairs: | | 4 |

| Insulation | |
|-------------------|------------------|
| Material | Nominal Diameter |
| PE - Polyethylene | 1.15 mm |

| Color Chart | |
|--------------------|-----------------------|
| Number | Color |
| Pair 1 | 1.Blue&Blue/White |
| Pair 2 | 2.Orange&Orange/White |
| Pair 3 | 3.Green&Green/white |
| Pair 4 | 4.Brown&Brown/White |

| Inner Jacket | | |
|--------------------------|-------|------------------|
| Material | Color | Nominal Diameter |
| PVC - Polyvinyl Chloride | Blue | 7.2 mm |

| Cabling | |
|---|----------------|
| Description | Filler |
| 4 pairs twisted together with central spline + overlapping polyester foil over cable core | Central Spline |

| Outer Shield | | | | |
|---------------------|-------------------------|--------------|--------------------|---------------|
| Type | Material | Coverage [%] | Drainwire Material | Drainwire AWG |
| Tape | Bi-Laminate (Alum+Poly) | 100% | TC - Tinned Copper | 26 |

| Outer Jacket | |
|---------------------|------------------|
| Material | Nominal Diameter |
| PE - Polyethylene | 8.2 mm |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance | Max DCR Unbalanced Between Pairs [%] |
|--------------------|--------------------|--------------------------------------|
| 95 Ohm/km | 2 % | 4 % |

Capacitance

| Max. Capacitance Unbalance | Max. Mutual Capacitance |
|----------------------------|-------------------------|
| 160 pF/100m | 56 pF/m |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 100 Ohm |

Delay

| Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-------------|-----------------|--|
| 538 ns/100m | 45 ns/100m | 65% |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Min. PSANEXT | Min. PSAACRF | Min. TCL [dB] | Min. ELTCTL [dB] |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--------------|--------------|---------------|------------------|
| 1 MHz | 2.1 dB/100m | 75.3 dB | 72.3 dB | 73.2 dB | 70.2 dB | 68 dB | 65 dB | 20 dB | 67 dB | 67 dB | 40 dB | 35 dB |
| 4 MHz | 3.8 dB/100m | 66.3 dB | 63.3 dB | 62.5 dB | 59.5 dB | 56 dB | 53 dB | 23 dB | 67 dB | 66.2 dB | 34 dB | 23 dB |
| 10 MHz | 5.9 dB/100m | 60.3 dB | 57.3 dB | 54.4 dB | 51.4 dB | 48 dB | 45 dB | 25 dB | 67 dB | 58.2 dB | 30 dB | 15 dB |
| 16 MHz | 7.5 dB/100m | 57.2 dB | 54.2 dB | 49.8 dB | 46.8 dB | 43.9 dB | 40.9 dB | 25 dB | 67 dB | 54.1 dB | 28 dB | 10.9 dB |
| 31.2 MHz | 10.5 dB/100m | 52.9 dB | 49.9 dB | 42.4 dB | 39.4 dB | 38.1 dB | 35.1 dB | 23.6 dB | 67.0 dB | 48.3 dB | 25.1 dB | 5.1 dB |
| 62.5 MHz | 15.0 dB/100m | 48.4 dB | 45.4 dB | 33.4 dB | 30.4 dB | 32.1 dB | 29.1 dB | 21.5 dB | 65.6 dB | 42.3 dB | 22 dB | |
| 100 MHz | 19.1 dB/100m | 45.3 dB | 42.3 dB | 26.2 dB | 23.2 dB | 28 dB | 25 dB | 20.1 dB | 62.5 dB | 38.2 dB | 20 dB | |
| 125 MHz | 21.5 dB/100m | 43.8 dB | 40.8 dB | 22.3 dB | 19.3 dB | 26.1 dB | 23.1 dB | 19.4 dB | 61 dB | 36.3 dB | 19 dB | |
| 200 MHz | 27.6 dB/100m | 40.8 dB | 37.8 dB | 13.2 dB | 10.2 dB | 22 dB | 19 dB | 18 dB | 58 dB | 32.2 dB | 17 dB | |
| 250 MHz | 31.1 dB/100m | 39.3 dB | 36.3 dB | 8.3 dB | 5.3 dB | 20 dB | 17 dB | 17.3 dB | 56.5 dB | 30.2 dB | 16 dB | |
| 300 MHz | 34.3 dB/100m | 38.1 dB | 35.1 dB | 3.9 dB | 0.9 dB | 18.5 dB | 15.5 dB | 17.3 dB | 55.3 dB | 28.7 dB | | |
| 500 MHz | 45.3 dB/100m | 34.8 dB | 31.8 dB | | | 14 dB | 11 dB | 17.3 dB | 52 dB | 24.2 dB | | |

| | |
|--------------|---|
| Table Notes: | Limits below 4MHz are for information only. Reference standard is IEC61156-5. |
|--------------|---|

Voltage

| Voltage Rating [V] |
|--------------------|
| Max. 72 V DC |

Temperature Range

| | |
|-----------------|----------------|
| UL Temp Rating: | -30°C To +60°C |
|-----------------|----------------|

Mechanical Characteristics

| | |
|---------------------------------------|----------|
| Bulk Cable Weight: | 70 kg/km |
| Max. Pull Tension: | 80 N |
| Min. Bend Radius During Installation: | 65 mm |

Standards

| | |
|---------------------|---|
| ISO/IEC Compliance: | IEC 61156-5, ISO/IEC 11801 |
| Data Category: | Category 6A |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 6A |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 |

Applicable Environmental and Other Programs

| | |
|---------------------------------|---------|
| Environmental Space: | Outdoor |
| EU Directive 2002/95/EC (RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Non-Halogenated: | No |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Related Part Numbers

Variants

| Item # | Color | Length |
|-------------------|-------|--------|
| O-10GA25A 010305M | Black | 305 m |

History

| | |
|----------------------|---|
| Update and Revision: | Revision Number: 0.14 Revision Date: 09-02-2025 |
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